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TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	09/585,682
	Filing Date	June 1, 2000
	First Named Inventor	Ko et al.
	Group Art Unit	2815
	Examiner Name	C. Chu
Attorney Docket Number		2269-3526.2US (97-1136.02/US)

ENCLOSURES (check all that apply)		
<input checked="" type="checkbox"/> Postcard receipt acknowledgment (attached to the front of this transmittal)	<input type="checkbox"/> Information Disclosure Statement, PTO/SB/08A (08-00); <input type="checkbox"/> copy of cited references	<input type="checkbox"/> Terminal Disclaimer
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<input type="checkbox"/> Letter to Chief Draftsman and copy of FIGS. with changes made in red	<input type="checkbox"/> Assignment Papers (for an Application)	
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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT		
Firm or Individual name	Brick G. Power	Registration No. 38,581
Signature		
Date	August 5, 2005	

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PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of:

Ko et al.

Serial No.: 09/585,682

Filed: June 1, 2000

For: SEMICONDUCTOR DEVICE
HAVING A SUBSTRATE, AN UNDOPED
SILICON OXIDE STRUCTURE, AND AN
OVERLYING DOPED SILICON OXIDE
STRUCTURE WITH A SIDEWALL
TERMINATING AT THE UNDOPED
SILICON OXIDE STRUCTURE (Amended)

Confirmation No.: 7481

Examiner: C. Chu

Group Art Unit: 2815

Attorney Docket No.: 2269-3526.2US

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REPLY BRIEF

Mail Stop Appeal Brief—Patents
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Attn: Board of Patent Appeals and Interferences

Sir:

This Reply Brief is being submitted in response to the Examiner's Answer dated
June 7, 2005, and in accordance with the requirements of 37 C.F.R. § 41.41.

VII. ARGUMENT

Each of claims 1-13 is patentable under 35 U.S.C. § 103(a) for reciting subject matter which is not obvious over that taught in Blalock, in view of teachings from Lur.

It has been asserted in the Examiner's Answer that one of ordinary skill in the art would have been motivated by the teachings of Lur to use an undoped silicon oxide as an etch stop for anisotropic removal of a doped silicon oxide and, thus, to replace the silicon nitride of structure layer 16 of Blalock with an undoped silicon oxide, thereby arriving at the subject matter recited in each of claims 1-13 of the above-referenced application. Specifically, the Examiner's Answer asserts that Lur teaches that wet or dry etching processes may be used to pattern a doped silicon oxide structure (*e.g.*, a borophosphosilicate glass (BPSG) layer 26) (col. 5, lines 10-16) located over an etch stop 28 formed from a silicon nitride, boron nitride, or undoped silicon dioxide (col. 5, lines 29-35).

While Lur does teach that wet or dry etch processes may be used and that etch stops comprising a silicon nitride, boron nitride, or undoped silicon dioxide may also be used, Lur does not teach or suggest any specific connections between the type of etchant (*i.e.*, wet or dry) employed and the materials (*i.e.*, silicon nitride, boron nitride, undoped silicon dioxide) that are suitable for use with a certain type of etchant. In particular, Lur does not specify whether any anisotropic etchants may be used to remove a doped silicon oxide down to an etch stop of, or with selectivity over, an undoped silicon oxide. Perhaps the reason for the lack of disclosure in Lur is that no anisotropic etchants were known generally in the art before the priority date of the above-referenced application to remove a doped silicon oxide with selectivity over an undoped silicon oxide.

In view of the lack of specificity provided by Lur, it is evident that the asserted combination of teachings from Blalock and Lur constitutes an improper hindsight reconstruction, which has been based upon the subject matter disclosed and claimed in the above-referenced application.

Therefore, one of ordinary skill in the art would not have been motivated to combine teachings from Blalock and Lur in the manner that has been asserted.

Moreover, it is respectfully submitted that, in view of the lack of guidance provided by Lur as to the identities of anisotropic etchants that can remove a doped silicon dioxide down to an etch stop comprising an undoped silicon oxide, or with selectivity over an undoped silicon oxide, it is respectfully submitted that one of ordinary skill in the art would have had no reason to expect the asserted combination of teachings from Blalock and Lur to result in the structures that are recited in any of claims 1-13 of the above-referenced application.

Thus, a *prima facie* case of obviousness has not been established against any of claims 1-13. Accordingly, the subject matter to which each of these claims is drawn is allowable over the teachings of Blalock and Lur, taken either separately or together.

XI. CONCLUSION

It is respectfully submitted that each of claims 1-13 is patentable under 35 U.S.C. § 103(a) for reciting subject matter which is not obvious over that taught in Blalock, in view of teachings from Lur.

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Accordingly, the rejections of claims 1-13 should be reversed, and each of these claims should be allowed.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Brick G. Power". The signature is fluid and cursive, with the first name "Brick" being more prominent.

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